

Application No.: 10/028,361

Reply to the Office Action dated: September 9, 2005

BASIS FOR THE AMENDMENT

Claim 5 has been canceled.

The limitations of Claim 5 have been included in Claim 1.

The limitations of original claim 1 have been included in Claim 13.

New Claims 14-24 have been added as supported by Claims 2-12 as originally filed.

No new matter is believed to have been added by entry of this amendment. Entry and favorable reconsideration are respectfully requested.

Upon entry of this amendment Claims 1-4 and 6-24 will now be active in this application.

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INTERVIEW SUMMARY

Applicants wish to thank Examiner Ahmad for the helpful and courteous discussion with Applicants' Representative on November 15, 2005. During this discussion it was noted that values "a" and "b" are discussed at page 8 of the specification.

REMARKS

Applicants wish to thank Examiner Ahmad indicating the allowability of Claims 5, 6 and 13 if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Accordingly, allowable Claim 13 has been rewritten in independent form and the limitations of allowable Claim 5 have been included in Claim 1. Accordingly, all claims should be allowable over the prior art of record.

The rejection of Claims 1-13 under 35 U.S.C. § 112, first paragraph, is traversed. Regarding the calculation of values “a” and “b”, Applicants wish to draw the Examiners’ attention to pages 7-9 of the specification which provide an explanation of the optical properties. In particular, page 8 states at lines 14-18 that a and b are calculated according to the following equations:

$$a = 17.5 \times (1.02 \times X - Y) / Y^{(1/2)}$$

$$b = 7.0 \times (Y - 0.847 \times Z) / Y^{(1/2)}.$$

Measurements were made based on JIS-Z8701, a copy of which (English translation) is enclosed herewith. JIS-Z8701 is mentioned at page 7, line 8, and page 8, line 11 of the specification as the standard for the measurements and calculations of the optical properties.

The display values “a” and “b” in transmitted light and the display value “b” in reflected light were calculated by assigning to the above formulae a value that is calculated by a method according to “5.2.2. Tristimulus values of transmitting object colors” and “5.2.1. Tristimulus values of reflecting object color” (pages 3 to 4 of English translation of JIS-Z8701).

The explanation of “5.2.2. Tristimulus values of transmitting object colors”.

The tristimulus values X, Y and Z are defined in $S(\lambda)$, $x(\lambda)$, $y(\lambda)$, $z(\lambda)$ and $R(\lambda)$ in the item “5.2.2.” The $S(\lambda)$ is a value in wavelength of 380 to 780 nm in case of using Standard

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illuminant C (means a light equal to a distribution of light intensity of daylight) of Attached Table 3 (e.g. in wavelength of 380 nm, $S(\lambda)$ is 33.00). The $x(\lambda)$, $y(\lambda)$, and $z(\lambda)$ each is a value in wavelength of 380 to 780 nm in attached Table 1 (e.g., in wavelength of 380 nm, $x(\lambda)$ is 0.0014). The $R(\lambda)$ is a reflectance measured by the following method (the transmittance can be measured by the similar method).


The reflectance and the transmittance were measured using a spectrophotometer (U3310, manufactured by HITACHI, LTD.) carrying a 150 Φ of integrating sphere, under the condition of two degree visual field (condition described in "1 Scope" of English translation of JIS-Z8710), a wavelength of 380 to 780 nm and at 0.5 nm interval.

Thus, this rejection should be withdrawn.

This application presents allowable subject matter, and the Examiner is kindly requested to pass it to issue. Should the Examiner have any questions regarding the claims or otherwise wish to discuss this case, he is kindly invited to contact Applicants' below-signed representative, who would be happy to provide any assistance deemed necessary in speeding this application to allowance.

Respectfully submitted,

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JIS

JAPANESE
INDUSTRIAL
STANDARD

Translated and Published by
Japanese Standards Association

JIS Z 8701 : 1999

**Colour specification—The CIE 1931
standard colorimetric system
and the CIE 1964 supplementary
standard colorimetric system**

ICS 17.180.20

**Descriptors : colour, colorimetry, designations, chromaticity, colour tests, numeric
representation**

Reference number : JIS Z 8701 : 1999 (E)

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Foreword

This translation has been made based on the original Japanese Industrial Standard revised by the Minister of International Trade and Industry through deliberations at the Japanese Industrial Standards Committee in accordance with the Industrial Standardization Law. Consequently JIS Z 8701 : 1995 is replaced with JIS Z 8701 : 1999.

Date of Establishment: 1952-08-25

Date of Revision: 1999-05-20

Date of Public Notice in Official Gazette: 1999-05-20

Investigated by: Japanese Industrial Standards Committee
Divisional Council on Basic Items

JIS Z 8701 : 1999, First English edition published in 2000-10

Translated and published by: Japanese Standards Association
4-1-24, Akasaka, Minato-ku, Tokyo, 107-8440 JAPAN

In the event of any doubts arising as to the contents,
the original JIS is to be the final authority.

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Printed in Japan

Colour specification—The CIE 1931 standard colorimetric system and the CIE 1964 supplementary standard colorimetric system

Introduction This Japanese Industrial Standard has been prepared based on Publication CIE No. 15.2 (1986) *Colorimetry, second edition* recommended by Commission Internationale de l'Eclairage in 1986 without modifying its technical content concerning with colour specification. However, the parts not included in CIE No. 15.2 are supplemently specified as the Japanese Industrial Standard.

On the other side, International Standards related to this Standard are ISO/CIE 10526 (1991) *CIE standard colorimetric illuminants, first edition* and ISO/CIE 10527 (1991) *CIE standard colorimetric observers, first edition*. The tables appended to this Standard correspond to the International Standard. But the values are used relative spectral power distributions at less frequent intervals of wavelength than every 1 nm and fewer decimal places than are given in the original International Standards.

1 Scope This Japanese Industrial Standard specifies the method to express the colours by the CIE 1931 standard colorimetric system⁽¹⁾ based on two degree visual field (hereafter referred to as "XYZ colour system") and by the CIE 1964 supplementary standard colorimetric system⁽²⁾ based on ten degree visual field (hereafter referred to as " $X_{10}Y_{10}Z_{10}$ colour system").

Notes (1) The colorimetric system, Commission Internationale de l'Eclairage (CIE) recommended in 1931.

(2) The colorimetric system, CIE recommended in 1964.

Remarks 1 XYZ colour system and $X_{10}Y_{10}Z_{10}$ colour system were recommended for use whenever good correlation with visual colour matching of fields of angular subtense between about 1° to 4° at the eye of observer and fields of angular subtense greater than about 4° is desired, respectively.

2 The colour specification provided in this Standard conforms to the colour specification in Publication CIE No.15.2 (1986) *Colorimetry, second edition* (hereafter abbreviated as CIE 15.2) recommended by CIE in 1986.

2 Normative references The following standards contain provisions which, through reference in this Standard, constitute provisions of this Standard. The most recent editions of the standards indicated below shall be applied.

JIS Z 8105 *Glossary of colour terms*

JIS Z 8717 *Methods of measurement for colour of fluorescent objects*

JIS Z 8720 *Standard illuminants and sources for colorimetry*

JIS Z 8722 *Methods of colour measurement—Reflecting or transmitting objects*

JIS Z 8724 *Methods of colour measurement—Light-source colour*

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3 Definitions For the purposes of this Standard, the definitions given in JIS Z 8105 and JIS Z 8720 apply, and the rest of the terms are as follows:

- a) **reflectance factor** When an object is illuminated under the same condition and reflected to the same solid angle of the same direction, the ratio of the radiant flux or luminous flux from the object to that from perfect reflecting diffuser is defined as the reflectance factor. If the receiving solid angle comes to null, the reflectance factor becomes identical to the radiance factor or luminance factor. If the receiving solid angle comes to 2π steradian, the reflectance factor becomes identical to the reflectance or luminous reflectance.
- b) **transmittance factor** When an object is illuminated under the same condition and transmitted to the same solid angle of the same direction, the ratio of the radiant flux or luminous flux from the object to that from perfect transmitting diffuser is defined as the transmittance factor. If the receiving solid angle comes to null, the transmittance factor becomes identical to the radiance factor or luminance factor. If the receiving solid angle comes to 2π steradian, the transmittance factor becomes identical to the transmittance or luminous transmittance.

4 Colour specification It shall be a principle that, for color specification, chromaticity coordinates x , y and tristimulus value Y are to be used or chromaticity coordinates x_{10} , y_{10} and tristimulus value Y_{10} are to be used.

Remarks : The subscript 10 in the chromaticity coordinates x_{10} , y_{10} and tristimulus value Y_{10} indicates that they are in terms of $X_{10}Y_{10}Z_{10}$ colour system.

5 Tristimulus values

5.1 Tristimulus values of light-source colours The tristimulus values X , Y , Z of a light-source colour according to XYZ colour system can be obtained by the following formulae:

$$\left. \begin{aligned} X &= k \int_{380}^{780} S(\lambda) \bar{x}(\lambda) d\lambda \\ Y &= k \int_{380}^{780} S(\lambda) \bar{y}(\lambda) d\lambda \\ Z &= k \int_{380}^{780} S(\lambda) \bar{z}(\lambda) d\lambda \end{aligned} \right\} \dots\dots\dots (1)$$

where, $S(\lambda)$: relative spectral distribution of radiant quantities from light-source

$\bar{x}(\lambda)$, $\bar{y}(\lambda)$, $\bar{z}(\lambda)$: colour matching function of XYZ colour system

k : proportional ratio, this shall be determined so that tristimulus value Y may meet the luminous quantity⁽³⁾.

Note (3) In XYZ colour system if $S(\lambda)$ is an absolute value of spectral concentration, k shall be put equal to $683 \text{ lm} \cdot \text{W}^{-1}$ for obtaining the absolute value of luminous quantity.

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The tristimulus values X_{10} , Y_{10} , Z_{10} of light-source colour for $X_{10}Y_{10}Z_{10}$ colour system can be obtained by using colour matching function $\bar{x}_{10}(\lambda)$, $\bar{y}_{10}(\lambda)$, $\bar{z}_{10}(\lambda)$ of $X_{10}Y_{10}Z_{10}$ colour system in place of $\bar{x}(\lambda)$, $\bar{y}(\lambda)$, $\bar{z}(\lambda)$ given in the formula (1).

Remarks: The tristimulus value Y_{10} for $X_{10}Y_{10}Z_{10}$ colour system does not correspond to the luminous quantity.

5.2 Tristimulus values of reflecting or transmitting objects

5.2.1 Tristimulus values of reflecting object colour The tristimulus values X , Y , Z of reflecting object colour which are presented by using XYZ colour system can be obtained by the following formulae:

$$\left. \begin{aligned} X &= K \int_{380}^{780} S(\lambda) \bar{x}(\lambda) R(\lambda) d\lambda \\ Y &= K \int_{380}^{780} S(\lambda) \bar{y}(\lambda) R(\lambda) d\lambda \\ Z &= K \int_{380}^{780} S(\lambda) \bar{z}(\lambda) R(\lambda) d\lambda \end{aligned} \right\} \dots\dots\dots (2)$$

$$K = \frac{100}{\int_{380}^{780} S(\lambda) \bar{y}(\lambda) d\lambda}$$

where, $S(\lambda)$: spectral distribution of standard illuminant to be used for colour specification

$\bar{x}(\lambda)$, $\bar{y}(\lambda)$, $\bar{z}(\lambda)$: colour matching function of XYZ colour system

$R(\lambda)$: spectral reflectance factor

Remarks: The tristimulus value Y for XYZ colour system makes itself a value, presented in percentage, of luminous reflectance factor R_v .

The tristimulus values X_{10} , Y_{10} , Z_{10} of reflecting object colour for $X_{10}Y_{10}Z_{10}$ colour system can be obtained by using colour matching function $\bar{x}_{10}(\lambda)$, $\bar{y}_{10}(\lambda)$, $\bar{z}_{10}(\lambda)$ of $X_{10}Y_{10}Z_{10}$ colour system in place of $\bar{x}(\lambda)$, $\bar{y}(\lambda)$, $\bar{z}(\lambda)$ given in the formula (2).

5.2.2 Tristimulus values of transmitting object colours The tristimulus values X , Y , Z of transmitting object colour which are presented by using XYZ colour system can be obtained by the following formulae:

$$\left. \begin{aligned} X &= K \int_{380}^{780} S(\lambda) \bar{x}(\lambda) T(\lambda) d\lambda \\ Y &= K \int_{380}^{780} S(\lambda) \bar{y}(\lambda) T(\lambda) d\lambda \\ Z &= K \int_{380}^{780} S(\lambda) \bar{z}(\lambda) T(\lambda) d\lambda \end{aligned} \right\} \dots\dots\dots (3)$$

$$K = \frac{100}{\int_{380}^{780} S(\lambda) \bar{y}(\lambda) d\lambda}$$

where, $S(\lambda)$: spectral distribution of standard illuminant to be used for colour specification

$\bar{x}(\lambda)$, $\bar{y}(\lambda)$, $\bar{z}(\lambda)$: colour matching function of XYZ colour system

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$T(\lambda)$: spectral transmittance factor

Remarks: The tristimulus value Y for XYZ colour system makes itself a value, presented in percentage, of luminous transmittance factor τ .

The tristimulus values X_{10} , Y_{10} , Z_{10} of transmitting object colour for $X_{10}Y_{10}Z_{10}$ colour system can be obtained by using colour matching function $\bar{x}_{10}(\lambda)$, $\bar{y}_{10}(\lambda)$, $\bar{z}_{10}(\lambda)$ of $X_{10}Y_{10}Z_{10}$ colour system in place of $\bar{x}(\lambda)$, $\bar{y}(\lambda)$, $\bar{z}(\lambda)$ given in the formula (3).

6 Colour matching functions The values of colour matching functions to be used for XYZ colour system and $X_{10}Y_{10}Z_{10}$ colour system are given in Attached Table 1 and Attached Table 2, respectively.

Remarks: The values of colour matching functions given in Attached Table 1 and Attached Table 2 are equivalent to the values in Table 2.1 and Table 2.2 in CIE 15.2.

7 Chromaticity coordinates

7.1 Obtainment of chromaticity coordinates The chromaticity coordinates x , y , z for XYZ colour system can be obtained by the following formulae:

$$\left. \begin{aligned} x &= \frac{X}{X+Y+Z} \\ y &= \frac{Y}{X+Y+Z} \\ z &= \frac{Z}{X+Y+Z} = 1-x-y \end{aligned} \right\} \dots\dots\dots (4)$$

where, X , Y , Z : tristimulus value

The chromaticity coordinates x_{10} , y_{10} , z_{10} for $X_{10}Y_{10}Z_{10}$ colour system can be obtained by replacing the tristimulus values X , Y , Z in formula (4) with the tristimulus values X_{10} , Y_{10} , Z_{10} for $X_{10}Y_{10}Z_{10}$ colour system.

7.2 Graphical presentation of chromaticity coordinates For the graphical presentation of chromaticity coordinates, the chromaticity diagram shown on a rectangular-coordinate system using x , y or x_{10} , y_{10} apply.

Informative reference: Spectral chromaticity coordinates The spectral chromaticity coordinates for XYZ colour system and $X_{10}Y_{10}Z_{10}$ colour system are shown in Annex Attached Table 1 and Annex Attached Table 2, and the chromaticity diagrams for XYZ colour system and $X_{10}Y_{10}Z_{10}$ colour system are shown in Annex Attached Fig. 1 and Annex Attached Fig. 2.

Remarks: The spectral chromaticity coordinates shown in Annex Attached Table 1 and Annex Attached Table 2 are the values of 380 nm to 700 nm of the spectral chromaticity coordinates defined in ISO/CIE 10527 that are given to five decimal places.

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8 Colour measurement

8.1 Colour measurement for light-source It shall use the method specified in JIS Z 8724.

8.2 Colour measurement for reflecting or transmitting object It shall use the method specified in JIS Z 8722. However, the colour measurement for fluorescent object shall use the method specified in JIS Z 8717.

9 Standard illuminants The standard illuminants to be used for the specification of reflecting or transmitting object colours shall be as given in JIS Z 8720. The relative spectral power distribution and chromaticity coordinates of standard illuminants are as given in Attached Table 3 and Attached Table 4, respectively.

Remarks : The values of relative spectral power distribution shown in Attached Table 3 are equivalent to the values of relative spectral power distribution from 380 nm to 780 nm given in Table 1.1 of CIE 15.2.

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Attached Table 1 Colour matching functions for XYZ colour system

Wavelength λ (nm)	$\bar{x}(\lambda)$	$\bar{y}(\lambda)$	$\bar{z}(\lambda)$	Wavelength λ (nm)	$\bar{x}(\lambda)$	$\bar{y}(\lambda)$	$\bar{z}(\lambda)$
380	0.001 4	0.000 0	0.006 5	580	0.916 3	0.870 0	0.001 7
385	0.002 2	0.000 1	0.010 5	585	0.978 6	0.816 3	0.001 4
390	0.004 2	0.000 1	0.020 1	590	1.026 3	0.757 0	0.001 1
395	0.007 6	0.000 2	0.036 2	595	1.056 7	0.694 9	0.001 0
400	0.014 3	0.000 4	0.067 9	600	1.062 2	0.631 0	0.000 8
405	0.023 2	0.000 6	0.110 2	605	1.045 6	0.566 8	0.000 6
410	0.043 5	0.001 2	0.207 4	610	1.002 6	0.503 0	0.000 3
415	0.077 6	0.002 2	0.371 3	615	0.938 4	0.441 2	0.000 2
420	0.134 4	0.004 0	0.645 6	620	0.854 4	0.381 0	0.000 2
425	0.214 8	0.007 3	1.039 1	625	0.751 4	0.321 0	0.000 1
430	0.283 9	0.011 6	1.385 6	630	0.642 4	0.265 0	0.000 0
435	0.328 5	0.016 8	1.623 0	635	0.541 9	0.217 0	0.000 0
440	0.348 3	0.023 0	1.747 1	640	0.447 9	0.175 0	0.000 0
445	0.348 1	0.029 8	1.782 6	645	0.360 8	0.138 2	0.000 0
450	0.336 2	0.038 0	1.772 1	650	0.283 5	0.107 0	0.000 0
455	0.318 7	0.048 0	1.744 1	655	0.218 7	0.081 6	0.000 0
460	0.290 8	0.060 0	1.669 2	660	0.164 9	0.061 0	0.000 0
465	0.251 1	0.073 9	1.528 1	665	0.121 2	0.044 6	0.000 0
470	0.195 4	0.091 0	1.287 6	670	0.087 4	0.032 0	0.000 0
475	0.142 1	0.112 6	1.041 9	675	0.063 6	0.023 2	0.000 0
480	0.095 6	0.139 0	0.813 0	680	0.046 8	0.017 0	0.000 0
485	0.058 0	0.169 3	0.616 2	685	0.032 9	0.011 9	0.000 0
490	0.032 0	0.208 0	0.465 2	690	0.022 7	0.008 2	0.000 0
495	0.014 7	0.258 6	0.353 3	695	0.015 8	0.005 7	0.000 0
500	0.004 9	0.323 0	0.272 0	700	0.011 4	0.004 1	0.000 0
505	0.002 4	0.407 3	0.212 3	705	0.008 1	0.002 9	0.000 0
510	0.009 3	0.503 0	0.158 2	710	0.005 8	0.002 1	0.000 0
515	0.029 1	0.608 2	0.111 7	715	0.004 1	0.001 5	0.000 0
520	0.063 3	0.710 0	0.078 2	720	0.002 9	0.001 0	0.000 0
525	0.109 6	0.793 2	0.057 3	725	0.002 0	0.000 7	0.000 0
530	0.165 5	0.862 0	0.042 2	730	0.001 4	0.000 5	0.000 0
535	0.225 7	0.914 9	0.029 8	735	0.001 0	0.000 4	0.000 0
540	0.290 4	0.954 0	0.020 3	740	0.000 7	0.000 2	0.000 0
545	0.359 7	0.980 3	0.013 4	745	0.000 5	0.000 2	0.000 0
550	0.433 4	0.995 0	0.008 7	750	0.000 3	0.000 1	0.000 0
555	0.512 1	1.000 0	0.005 7	755	0.000 2	0.000 1	0.000 0
560	0.594 5	0.995 0	0.003 9	760	0.000 2	0.000 1	0.000 0
565	0.678 4	0.978 6	0.002 7	765	0.000 1	0.000 0	0.000 0
570	0.762 1	0.952 0	0.002 1	770	0.000 1	0.000 0	0.000 0
575	0.842 5	0.915 4	0.001 8	775	0.000 1	0.000 0	0.000 0
				780	0.000 0	0.000 0	0.000 0
Total					21.371 4	21.371 1	21.371 5

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Attached Table 2 Colour matching functions for $X_{10}Y_{10}Z_{10}$ colour system

Wavelength λ (nm)	$\bar{x}_{10}(\lambda)$	$\bar{y}_{10}(\lambda)$	$\bar{z}_{10}(\lambda)$	Wavelength λ (nm)	$\bar{x}_{10}(\lambda)$	$\bar{y}_{10}(\lambda)$	$\bar{z}_{10}(\lambda)$
380	0.000 2	0.000 0	0.000 7	580	1.014 2	0.868 9	0.000 0
385	0.000 7	0.000 1	0.002 9	585	1.074 3	0.825 6	0.000 0
390	0.002 4	0.000 3	0.010 5	590	1.118 5	0.777 4	0.000 0
395	0.007 2	0.000 8	0.032 3	595	1.134 3	0.720 4	0.000 0
400	0.019 1	0.002 0	0.086 0	600	1.124 0	0.658 3	0.000 0
405	0.043 4	0.004 5	0.197 1	605	1.089 1	0.593 9	0.000 0
410	0.084 7	0.008 8	0.389 4	610	1.030 5	0.528 0	0.000 0
415	0.140 6	0.014 5	0.656 8	615	0.950 7	0.461 8	0.000 0
420	0.204 5	0.021 4	0.972 5	620	0.856 3	0.398 1	0.000 0
425	0.264 7	0.029 5	1.282 5	625	0.754 9	0.339 6	0.000 0
430	0.314 7	0.038 7	1.553 5	630	0.647 5	0.283 5	0.000 0
435	0.357 7	0.049 6	1.798 5	635	0.535 1	0.228 3	0.000 0
440	0.388 7	0.062 1	1.967 3	640	0.431 6	0.179 8	0.000 0
445	0.386 7	0.074 7	2.027 3	645	0.343 7	0.140 2	0.000 0
450	0.370 7	0.089 5	1.994 8	650	0.268 3	0.107 6	0.000 0
455	0.343 0	0.106 3	1.900 7	655	0.204 3	0.081 2	0.000 0
460	0.302 3	0.128 2	1.745 4	660	0.152 6	0.060 3	0.000 0
465	0.254 1	0.152 8	1.554 9	665	0.112 2	0.044 1	0.000 0
470	0.195 6	0.185 2	1.317 6	670	0.081 3	0.031 8	0.000 0
475	0.132 3	0.219 9	1.030 2	675	0.057 9	0.022 6	0.000 0
480	0.080 5	0.253 6	0.772 1	680	0.040 9	0.015 9	0.000 0
485	0.041 1	0.297 7	0.570 1	685	0.028 6	0.011 1	0.000 0
490	0.016 2	0.339 1	0.415 3	690	0.019 9	0.007 7	0.000 0
495	0.005 1	0.395 4	0.302 4	695	0.013 8	0.005 4	0.000 0
500	0.003 8	0.460 8	0.218 5	700	0.009 6	0.003 7	0.000 0
505	0.015 4	0.531 4	0.159 2	705	0.006 6	0.002 6	0.000 0
510	0.037 5	0.606 7	0.112 0	710	0.004 6	0.001 8	0.000 0
515	0.071 4	0.685 7	0.082 2	715	0.003 1	0.001 2	0.000 0
520	0.117 7	0.761 8	0.060 7	720	0.002 2	0.000 8	0.000 0
525	0.173 0	0.823 3	0.043 1	725	0.001 5	0.000 6	0.000 0
530	0.236 5	0.875 2	0.030 5	730	0.001 0	0.000 4	0.000 0
535	0.304 2	0.923 8	0.020 6	735	0.000 7	0.000 3	0.000 0
540	0.376 8	0.962 0	0.013 7	740	0.000 5	0.000 2	0.000 0
545	0.451 6	0.982 2	0.007 9	745	0.000 4	0.000 1	0.000 0
550	0.529 8	0.991 8	0.004 0	750	0.000 3	0.000 1	0.000 0
555	0.616 1	0.999 1	0.001 1	755	0.000 2	0.000 1	0.000 0
560	0.705 2	0.997 3	0.000 0	760	0.000 1	0.000 0	0.000 0
565	0.793 8	0.982 4	0.000 0	765	0.000 1	0.000 0	0.000 0
570	0.878 7	0.955 5	0.000 0	770	0.000 1	0.000 0	0.000 0
575	0.951 2	0.915 2	0.000 0	775	0.000 0	0.000 0	0.000 0
				780	0.000 0	0.000 0	0.000 0
Total					23.329 4	23.332 4	23.334 3

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Attached Table 3 Relative spectral power distribution of standard illuminants A, C and D₆₅

Wavelength λ (nm)	Standard illuminant A	Standard illuminant C	Standard illuminant D ₆₅	Wavelength λ (nm)	Standard illuminant A	Standard illuminant C	Standard illuminant D ₆₅
380	9.80	33.00	49.98	580	114.44	97.80	95.79
385	10.90	39.92	52.31	585	118.08	95.43	92.24
390	12.09	47.40	54.65	590	121.73	93.20	88.69
395	13.35	55.17	68.70	595	125.39	91.22	89.35
400	14.71	63.30	82.75	600	129.04	89.70	90.01
405	16.15	71.81	87.12	605	132.70	88.83	89.80
410	17.68	80.60	91.49	610	136.35	88.40	89.60
415	19.29	89.53	92.46	615	139.99	88.19	88.65
420	20.99	98.10	93.43	620	143.62	88.10	87.70
425	22.79	105.80	90.06	625	147.24	88.06	85.49
430	24.67	112.40	86.68	630	150.84	88.00	83.29
435	26.64	117.75	95.77	635	154.42	87.86	83.49
440	28.70	121.50	104.86	640	157.98	87.80	83.70
445	30.85	123.45	110.94	645	161.52	87.99	81.86
450	33.09	124.00	117.01	650	165.03	88.20	80.03
455	35.41	123.60	117.41	655	168.51	88.20	80.12
460	37.81	123.10	117.81	660	171.96	87.90	80.21
465	40.30	123.30	116.34	665	175.38	87.22	81.25
470	42.87	123.80	114.86	670	178.77	86.30	82.28
475	45.52	124.09	115.39	675	182.12	85.30	80.28
480	48.24	123.90	115.92	680	185.43	84.00	78.28
485	51.04	122.92	112.37	685	188.70	82.21	74.00
490	53.91	120.70	108.81	690	191.93	80.20	69.72
495	56.85	116.90	109.08	695	195.12	78.24	70.67
500	59.86	112.10	109.35	700	198.26	76.30	71.61
505	62.93	106.98	108.58	705	201.36	74.36	72.98
510	66.06	102.30	107.80	710	204.41	72.40	74.35
515	69.25	98.81	106.30	715	207.41	70.40	67.98
520	72.50	96.90	104.79	720	210.36	68.30	61.60
525	75.79	96.78	106.24	725	213.27	66.30	68.74
530	79.13	98.00	107.69	730	216.12	64.40	69.89
535	82.52	99.94	106.05	735	218.92	62.80	72.49
540	85.95	102.10	104.41	740	221.67	61.50	75.09
545	89.41	103.95	104.23	745	224.36	60.20	69.34
550	92.91	105.20	104.05	750	227.00	59.20	63.59
555	96.44	105.67	102.02	755	229.59	58.50	55.01
560	100.00	105.30	100.00	760	232.12	58.10	46.42
565	103.58	104.11	98.17	765	234.59	58.00	56.61
570	107.18	102.30	96.33	770	237.01	58.20	66.81
575	110.80	100.15	96.06	775	239.37	58.50	65.09
				780	241.68	59.10	63.38